

**SAS Superstructure**

Location: 04-SF-80-13.2 / 13.9

Client Name: CalTrans

Run date 21-Nov-14

Time 10:02 AM

**Daily Diary Report by Bid Item**

Contract No.: 04-0120F4

Diary #: 073 Const Calendar Day: 281 Date: 16-Jun-2010 Wednesday

Inspector Name: Brignano, Bob Title: Transportation Engineer

Inspection Type:

Shift Hours: Break: Over Time:

Federal ID:

Location:

Reviewer: Schmitt, Alex Approved Date: Status: Submit

**04-0120F4  
04-SF-80-13.2/13.9  
Self-Anchored  
Suspension Bridge****Weather**

Temperature	7 AM	12 PM	4 PM
Precipitation			Condition

Working Day ☒ If no, explain:**Diary:**

Dispute

**General Comments**ITEM 52 FURNISH STRUCTURAL STEEL (BRIDGE)(TOWER);  
DACROMET COATED A490M ASSEMBLIES TESTING:

Today, ABF is performing a test with Dacromet coated assemblies (bolt, nut, washer). This work is inspected by others. Ironworkers tension assemblies in a 10'x10' conex container with air monitors and a blower to determine the amount of Dacromet exposure from typical fastener assembly tensioning operations.

ITEM 52 FURNISH STRUCTURAL STEEL (BRIDGE)(TOWER);  
ITEM 55 FURNISH STRUCTURAL STEEL (BRIDGE)(BOX GIRDER);  
HIGH STRENGTH FASTENER ASSEMBLY PRE-INSTALLATION TESTING:

For ABF, engineers Chris Bausone and Sabrina Levine are present for testing. For CT, Bob Brignano is present for testing. Today's testing is for rotational capacity, minimum tension verification, and inspection torque. Work happens at Bolt Testing Conex ABF ID 002079 with Skidmore Model HT 4000 ABF ID 000612 in the warehouse. Testing rocap lots is 0930 to 1230 (work through lunch). Ten (10) rocap lots (M20) are tested.

The start of testing is delayed due to not having a socket in the bolt testing conex that fits the metric M20 nuts. After some time, ABF was able to find the proper socket for this material.

One rocap lot assembly (DHGM200004, M20x100) that was planned to be tested today is not tested today, because there is not enough material for testing and for use in the field by ABF. This particular rocap lot assembly is material that was sent from LeJeune to ZPMC for use in the shop, but was not used at ZPMC in the shop and will instead be installed by ABF in the field. Excess quantities of certain LeJeune rocap lot assemblies that had previously been sent from LeJeune to ZPMC for certain bolting applications where ABF will be doing the rocap lot assembly installation instead have been sent from ZPMC to ABF which needs the quantities of material for field installation. This is protected and sealed material with traceability from LeJeune that ZPMC shipped to ABF. We have rocap testing results, including inspection torque values, from the same testing procedures at ZPMC which were witnessed by CT inspectors at the shop facility. For this rocap lot, those values from testing at ZPMC are used in lieu of testing by ABF for the field use of the same rocap lot that was used in the shop.

One rocap lot assembly (DHGM200025, M20x150) has an issue with the first assembly tested. At the end of the test, the tension level dropped significantly as the threads stripped. ABF tested another 5



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**Inspector Name** Brignano, Bob

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assemblies (for a total of 6 assemblies tested, which is 1 more than planned) with no issues with the other 5 assemblies tested. We considered additional testing (note: already doing more rocap and min tension testing than required), but instead examined the data to draw conclusions about the acceptability of the material. We examine the data from that first assembly and noticed that the tension at all rotation amounts were lower than they were for the other 5 assemblies. The thread strip behavior instead of a fracture, along with the low tension values at all degrees of rotation, indicated that the nut threads may have been cross-threaded with the bolt threads at the start of the test. We determined that this first test was not a representative test and that the other 5 successful tests with consistent test results were the valid and representative tests. We determined that this rocap lot is acceptable for use with the first test thrown out as not representative of properly tested material.

See the attached Bolt Test Form for details of the testing.